Permit Fact Sheet

General Information

Permit Number:	WI-0066885-01-0
Permittee Name:	Brooks Farms Dairy LLC
Address:	N1757 Cty Hwy A
City/State/Zip:	Waupaca WI 54981
Discharge Location:	N1757 Cty Hwy A Waupaca WI 54981
Receiving Water:	Walla Wall Creek within the Partridge Lake-Wolf River Watershed and groundwater

Animal Units					
	Current AU		**Proposed AU** **(Note: If all zeroes, expansions are not expected during permit term)**		
Animal Type	**Mixed**	**Individual**	**Mixed**	**Individual**	**Date of Proposed Expansion**
Dairy Calves (under 400 lbs.)	28	0	28	0	12/01/2020
Milking and Dry Cows	685	699	980	1001	12/01/2020
Milking and Dry Cows	791	808	0	0	
Heifers (400 lbs. to 800 lbs.)	120	200	120	200	12/01/2020
Heifers (400 lbs. to 800 lbs.)	198	330	0	0	
Heifers (800 lbs. to 1200 lbs.)	132	120	0	0	
Heifers (800 lbs. to 1200 lbs.)	110	100	110	100	12/01/2020
Bulls (each)	1	1	0	0	12/01/2020
Total	2065	1507	1238	1001	

Facility Description

Brooks Farms Dairy LLC is an existing Concentrated Animal Feeding Operation (CAFO). Brooks Farms Dairy LLC is owned and operated by Ron and Zoey Brooks. It currently has 1,182 animal units and based on current herd size Brooks Farms Dairy has approximately 289 days of liquid manure storage, and 59 days of solid manure storage. Brooks Farms Dairy generates 9,044,577 gallons of liquid manure annually. Brooks Farms Dairy LLC has a total of 1,476 acres available for land application of manure and process wastewater. Of this acreage, 1,109 acres are owned and 367 acres are rented.

Sample Point Designation For Animal Waste

Sample Point Number	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)	
001	Sample point 001 is for liquid manure and process wastewater land applied from waste storage facility 1 (WSF 1). WSF 1 is a concrete lined storage located to the west of the existing feed storage area. The facility has a capacity of 7,068,102 gallons and was constructed in 2016. This storage accepts manure and process wastewater from the parlor and adjacent animal barns. WSF 1 will require an engineering evaluation, see Schedules section for due dates.	
002	Sample point 002 is for liquid manure and process wastewater land applied from waste storage facility 2 (WSF 2). WSF 2 is a concrete lined storage located to the north of the existing feed storage area. The facility was constructed in 2008. This storage accepts incidental runoff from the feed storage area. WSF 2 will require an engineering evaluation or abandonment plan if future use is not planned, see Schedules section for due dates.	
003	Sample point 003 is for solid manure sources that are directly land applied and not stored in a waste storage facility. This includes solid manure sources such as bedpack, calf hutch manure, maternity pen bedpack, headland stacking locations, etc. Representative samples shall be taken for each manure source type.	
004	Sample point 004 is for and manure solids removed from the bottom of all liquid waste storage facilities. This includes manure-laden sand solids, manure fiber solids, etc. Representative samples shall be taken from each waste storage facility.	
005	Sample point 005 is for visual monitoring and inspection of the feed storage area and associated runoff control system. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to the monitoring program. An engineering evaluation and installation of permanent runoff controls for the feed storage area shall be submitted according to the Schedules section of the permit.	
006	Sample point 006 is for visual monitoring and inspection of all production site storm water conveyance systems. This includes roof gutter and downspout structures, drainage tile systems, grassed waterways and other diversion systems that transport uncontaminated storm water. Proper operation and maintenance is required to keep uncontaminated runoff diverted away from manure and process wastewater handling systems. Weekly inspections are required and shall be recorded according to the monitoring program.	

1 Livestock Operations - Proposed Operation and Management

Production Area Discharge Limitations

Beginning on the effective date of the permit, the permittee may not discharge pollutants from the operation's production area (e.g., manure storage areas, outdoor animal lots, composting and leachate containment systems, milking center wastewater treatment/containment systems, raw material storage areas) to navigable waters, except in the event a 25-year, 24-hour rainfall event (or greater) causes the discharge from a structure which is properly designed and maintained to contain a 25-year, 24-hour rainfall event for this location as determined under s. NR 243.04. If an allowable discharge occurs from the production area, state water quality standards may not be exceeded.

Runoff Control

The permit requires control of contaminated runoff from all elements of the production area to prevent a discharge of pollutants to navigable waters in accordance with the Production Area Discharge Limitations and to comply with surface water quality standards and groundwater standards. Beginning on the effective date of this permit, (if needed) interim measures shall be implemented to prevent discharges of pollutants to navigable waters. In addition, permanent runoff

control system(s) shall be designed, operated and maintained in accordance with the requirements found in USDA Natural Resources Conservation Service standards and ch. NR 243, Wis. Adm. Code. If any upgrading or modifications to runoff controls are necessary, formal engineering plans and specifications must submitted to the Department for approval.

Manure and Process Wastewater Storage

The permit requires the operation to have adequate storage for manure and process wastewater and that storage or containment facilities are designed, operated and maintained to prevent overflows and discharges to waters of the state. In order to prevent overflows, the permittee must maintain levels of materials in liquid storage or containment facilities at or below certain levels including a one foot margin of safety that can never be exceeded. If any upgrading or modifications to the storage facilities are necessary, formal engineering plans and specifications must submitted to the Department for approval.

The permittee currently has approximately 289 days of storage for liquid manure. The permittee must maintain 180 days of storage, unless temporary reductions in required storage are approved by the Department.

Solid Manure Stacking

The operation has proposed to stack solid manure. All stacking of solid manure shall be done in accordance ch. NR 243, Wis. Adm. Code, which includes restrictions from NRCS Standard 313. Stacking of manure is considered to be part of the production area and is subject to the Production Area Discharge Limitations.

Ancillary Service and Storage Areas

The permittee shall take preventative maintenance actions and conduct visual inspections to minimize pollutant discharges from areas of the operation that are not part of the production area or land application areas. These areas are called ancillary service and storage areas and include access roads, shipping and receiving areas, maintenance areas, refuse piles and CAFO outdoor vegetated areas.

Nutrient Management

With 1,121, it is estimated that approximately 9,044,577 gallons of manure and process wastewater will be produced per year. The permittee owns *approximately* 1,109 acres of cropland and rents about 367acres. Given the rotation commonly used by the permittee, 1,108 acres are available (or open) to receive manure and process wastewater on an annual basis. The permit requires all landspreading of manure and process wastewater be completed in accordance with an approved nutrient management plan. The permit will require sampling and analysis of manure and process wastewater that will be landspread. Landspreading rates must be adjusted based on sample analysis. The permit requires the permittee to maintain a daily log that documents landspreading activities. The permit also requires the submittal of an annual report that summarizes all landspreading activities. Plans must be updated annually to reflect cropping plans and other operational changes. Among the requirements, the plans must include detailed landspreading information including field by field nutrient budgets.

The permittee is required to implement a number or practices to address potential water quality impacts associated with the land application of manure and process wastewater. Among the permit conditions are restrictions on manure ponding, restrictions on runoff of manure and process wastewater from cropped fields, and setbacks from wells and direct conduits to groundwater (e.g., sinkholes, fractured bedrock at the surface). In addition, the permittee must implement a phosphorus based nutrient management plan that addresses phosphorus delivery to surface waters by basing manure and process wastewater applications on soil test phosphorus levels or the Wisconsin Phosphorus index. Additional phosphorus application restrictions apply to fields that are high in soil test phosphorus (>100 ppm).

The permitee must also implement conservation practices when applying manure near navigable waters and their conduits, referred to as the Surface Water Quality Management Area (SWQMA). These practices include a 100-foot setback from navigable waters and their conduits, a 35-foot vegetated buffer adjacent to the navigable water or conduit, or a practice that provides equivalent pollutant reductions equivalent to or better than the 100-foot setback.

In addition, the permittee must comply with restrictions on land application of manure and process wastewater on frozen or snow-covered ground. Included in these restrictions is a prohibition on surface applications of solid manure (≥12% solids) on frozen or snow-covered ground during February and March.

Monitoring and Sampling Requirements

The permittee must submit a monitoring and inspection program that outlines how the permittee will conduct self-inspections to determine compliance with permit conditions. These self-inspections include visual inspections of water lines, diversion devices, storage and containment structures and other parts of the production area. The permit requires periodic inspections and calibrations of landspreading equipment. The permittee must take corrective actions to problems identified inspections or otherwise notify the Department. Samples of manure, process wastewater and soils receiving land applied materials from the operation must also be collected and analyzed.

Sampling Points

The permit identifies the different sources of land applied materials (e.g., manure storage facilities, milking centers, egg-washing facilities) as "Sampling Points." For these Sampling Points, the permittee is required to sample and analyze the different sources for nutrients and other parameters which serve as the basis for determining rates of application for these materials. Other areas are also identified as Sampling Points as a means of identifying them as areas requiring action by the permittee, such as an upgrade or evaluation of a certain system or structure (e.g., runoff control systems), even though sampling is not actually required.

Sample Point Number: 001- WSF 1 - Big Storage ; 002- WSF 2 - Small Storage

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Total		lb/1000gal	2/Month	Grab	
Nitrogen, Available		lb/1000gal	2/Month	Calculated	
Phosphorus, Total		lb/1000gal	2/Month	Grab	
Phosphorus, Available		lb/1000gal	2/Month	Calculated	
Solids, Total		Percent	2/Month	Grab	

1.1.1 Changes from Previous Permit

First Issuance

1.1.2 Explanation of Operation and Management Requirements

Manure must be properly stored and land applied according to the permit and nutrient management plan.

Sample Point Number: 003- Misc Solid Manure Sources ; 004- Settled Solid Manure

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Total		lbs/ton	Quarterly	Grab	
Nitrogen, Available		lbs/ton	Quarterly	Calculated	
Phosphorus, Total		lbs/ton	Quarterly	Grab	
Phosphorus, Available		lbs/ton	Quarterly	Calculated	
Solids, Total		Percent	Quarterly	Grab	

1.1.3 Changes from Previous Permit

First Issuance

1.1.4 Explanation of Operation and Management Requirements

Solid manure sources must be properly sampled and land applied according to the permit and nutrient management plan.

Sample Point Number: 005- Feed Storage Runoff Controls and 006- Storm Water Runoff Controls

1.1.5 Changes from Previous Permit

First Issuance

1.1.6 Explanation of Operation and Management Requirements

Proper operation and maintenance is required to ensure unlawful discharges to waters of the state do not occur. Weekly or quarterly inspections are required and shall be recorded according to the monitoring plan.

2 Schedules

2.1 Emergency Response Plan

Required Action	Due Date
Develop Emergency Response Plan: Develop a written Emergency Response Plan within 30 days of permit coverage, available to the Department upon request.	5/01/2022

2.2 Monitoring & Inspection Program

Use of the department's monitoring and inspection program template is encouraged, but optional

Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the Monitoring and Sampling Requirements subsection, the permittee shall submit a proposed monitoring and inspection program within 90 days of the effective date of this permit.	06/30/2022

2.3 Annual Reports

Submit Annual Reports by January 31st of each year in accordance with the Annual Reports subsection in Standard Requirements.

Required Action	Due Date
Submit Annual Report #1: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2023
Submit Annual Report #2: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2024
Submit Annual Report #3: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2025
Submit Annual Report #4: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2026
Submit Annual Report #5: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2027
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed.	

2.4 Nutrient Management Plan

Submit annual nutrient management plan (NMP) updates by March 31 of each year. Note, in addition to annual NMP updates, submit NMP amendments and substantial revisions to the department for written approval prior to implementation of any changes to the NMP.

Required Action	Due Date
Management Plan Submittal: Submit any necessary updates to the Nutrient Management Plan to meet the conditions outlined in this permit (see conditions in the Livestock Operational and Sampling Requirements section).	
Management Plan Annual Update #1: Submit an Annual Update to the Nutrient Management Plan by March 31st of each year. Note: In addition to Annual Updates, submit Management Plan Amendments to the Department for written approval prior to implementation of any changes to nutrient management practices, in accordance with the Nutrient Management requirements in the Livestock Operational and Sampling Requirements section.	03/31/2023
Management Plan Annual Update #2: Submit an Annual Update to the Nutrient Management Plan.	03/31/2024
Management Plan Annual Update #3: Submit an Annual Update to the Nutrient Management Plan.	03/31/2025
Management Plan Annual Update #4: Submit an Annual Update to the Nutrient Management Plan.	03/31/2026
Management Plan Annual Update #5: Submit an Annual Update to the Nutrient Management Plan.	03/31/2027
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient	

Management Plan until permit reissuance has been completed.	

2.5 Manure Storage Facility - Engineering Evaluation

Applicable to sample points 001, 002: WSF 1, WSF 2.

Required Action	Due Date
Written Report: Submit a written report evaluating the existing manure storage facility's ability to meet the conditions in the Production Area Discharge Limitations and Manure and Process Wastewater Storage subsections and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	10/30/2022
Plans and Specifications: Submit plans and specifications for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code, to permanently correct any adverse manure storage conditions.	07/31/2023
Corrections and Post Construction Documentation: Complete construction on the manure storage facility that permanently corrects any adverse conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	03/30/2025

2.6 Manure Storage Facility - Abandonment

Applicable to WSF 2, required only if abandonment of the storage is needed

Required Action	Due Date
Abandonment Plan: Submit an abandonment plan for WSF 2 to the Department for approval in accordance with USDA Natural Resource Conservation Services Technical Guide, Section IV, Standard 360 outlining the proposed method of abandonment.	11/30/2022
Complete Abandonment: Complete abandonment as approved by the Department.	11/30/2023

2.7 Feed Storage - Engineering Evaluation

Applicable to sample point 005, for feed storage area

Required Action	Due Date
Written Description of Existing System: Submit an engineering evaluation that includes a written description of the existing feed storage area and its adequacy to meet the conditions found in the Production Area Discharge Limitations subsection and NR 243.15, Wis. Adm. Code.	10/31/2022
Plans and Specifications: Submit plans and specifications for Department review and approval to permanently correct any adverse conditions identified as part of the engineering evaluation for the feed storage area in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code.	07/31/2023
Corrections and Post Construction Documentation: Complete construction of improvements to permanently correct any adverse conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	03/31/2024

2.8 Runoff Control System - Installation

Applicable to sample point 005, for runoff controls for the permanent feed storage area

Required Action	Due Date
Plans and Specifications: Submit plans and specifications for a permanent feed storage runoff control system for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code. See Standard Requirements for plan content information.	07/31/2022
Complete Installation: Complete construction of runoff control system. System shall be functional and in operation by the specified Date Due. Post construction documentation shall be submitted within 60 days of completion of the project.	04/30/2023

2.9 Permanent Markers - Installation

Applicable to sample points 001, 002: WSF 1, WSF 2 consistent with department requirements

Required Action	Due Date
Complete Installation: Complete installation of permanent markers. The facility shall be functional and in operation by the specified Date Due. Post construction documentation shall be submitted within 60 days of completion of the project.	11/30/2022

2.10 Waste Transfer System - Engineering Evaluation

Applicable to existing waste transfer system on site.

Required Action	Due Date
Written Description of Existing System: Submit a written description of the existing runoff control system and its adequacy to permanently meet the conditions in the Production Area Discharge Limitations and Runoff Control subsections and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	10/31/2022
Plans and Specifications: Submit plans and specifications for Department review and approval to permanently correct any adverse runoff control conditions in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code.	03/31/2023
Corrections and Post Construction Documentation: Complete construction of runoff controls that permanently correct any adverse runoff control conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	11/30/2024

2.11 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	10/01/2026

2.12 Explanation of Schedules

Emergency Response Plan, Monitoring and Inspection Program – Schedules consistent with permit requirements

Annual Reports, Nutrient Management Plan, Submit Permit Reissuance Application - Schedules consistent with permit requirements.

Other schedule items are required to comply with s. NR 243 and WPDES permit conditions.

Attachments:

Plan Approval Letter(s)

Public Notice

Proposed Expiration Date:

March 31, 2027

Prepared By:

Bethani Chambers Agricultural Runoff Management Specialist

Date: 2/4/2022